

### ***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-6, 13-24, and 31-41 are pending in the application, with claims 1, 13, 19, 31, and 37 being the independent claims. Claims 7-12, 25-30, and 42 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. Claims 1, 13, 14, 16-19, 31, 32 and 34-40 are sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

### ***Objections to the Drawings***

In the office action, the Examiner objected to the drawings under 37 C.F.R. § 1.83(a), because they fail to show "printer 508" as described in paragraph [0052] line 6 of the specification.<sup>1</sup> It is believed that this reference to "printer 508" was inadvertently included in the specification at the time of filing. Consequently, paragraph [0052] has been amended to remove this reference to "printer 508". This amendment is believed to introduce no new matter and its entry is respectfully requested. Because this amendment

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<sup>1</sup> In the Office Action, the Examiner states that "printer 508" is "described in paragraph 55 line 6 of the specification". However, paragraph [0055] of the specification does not contain any reference to "printer 508", while paragraph [0052] line 6 does. Therefore, for the purposes of this response, Applicants have assumed that the Examiner meant to refer to paragraph [0052] line 6.

renders the Examiner's objection to the drawings moot, Applicants respectfully request that this objection be reconsidered and withdrawn.

***Objections to the Specification***

In the office action, the Examiner objected to various informalities in the specification. In response, the following amendments have been made: in paragraph [0045] line five, "402" has been amended to read "302"; in paragraph [0055] line two, "106" has been amended to read "306". These amendments are believed to introduce no new matter and their entry is respectfully requested. Based on these amendments, Applicants respectfully request that the Examiner's objections to the specification be reconsidered and withdrawn.

***Claim Objections***

The Examiner objected to claim 39 because the claim term "infrared" recited therein should be spelled "infra-red." Applicants have amended claim 39 accordingly. Based on this amendment, Applicants respectfully request that the Examiner's objection to claim 39 be reconsidered and withdrawn.

***Rejections under 35 U.S.C. § 112***

The Examiner has rejected claims 1-7 and 38-39 under 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter which the

Applicants regard as the invention. In particular, the Examiner rejected claim 1 for insufficient antecedent basis in that "[i]t is unclear if the article in line 7 of claim 1 is the same article as in line 3." In response, Applicants have amended claim 1 as follows: in line 3 and line 7, "an article" has been amended to read "the article". Applicants respectfully submit that this amendment to claim 1 overcomes the antecedent basis rejection and therefore request that this rejection be reconsidered and withdrawn.

Additionally, the Examiner rejected claims 38-39 on the basis that the limitation "said latent marking" finds insufficient antecedent basis in the claim. In response, Applicants have amended claims 38-39 so that the limitation "said latent marking" is replaced by the limitation "said first marking". Applicants respectfully submit that these amendments to claims 38-39 overcome the antecedent basis rejections and therefore request that these rejections be reconsidered and withdrawn.

***Rejections under 35 U.S.C. § 102***

The Examiner has rejected claims 1-6 and 19-24 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,974,150 to Kaish *et al.* (hereinafter "Kaish"). Based on the following comments, Applicants respectfully traverse.

Kaish is directed toward an anti-counterfeiting system that includes an "authentication label and reader combine[d] to form a high security system to thwart counterfeiting in a wide range of applications." *See Kaish*, column 27, lines 9-11. In particular, Kaish teaches a system that comprises a label upon which the following items are printed: a "fiber pattern", "a code number representing the fiber pattern", and "manufacturing information" (e.g. serial number, date, or location). *See Kaish*, column

27 lines 22-28. A hand-held scanner is used to determine the authenticity of the labels.

"The label is authentic only if the scanner determines that the characteristics of the label and accompanying goods correspond with the printed code on the label." *See* Kaish, column 27 line 32-36.

Claim 1 as currently amended recites a method of creating a counterfeit resistant article that includes the steps of:

- reading a first pattern from the article;
- encoding said first pattern into a first data set;
- transforming said first data set into a second data set;
- converting said second data set into a second pattern; and
- marking the article with said second pattern.

Kaish does not teach or suggest each and every feature of claim 1. For example, Kaish does not teach or suggest "transforming said first data set into a second data set" as recited in claim 1. Rather, Kaish teaches reading a pattern (the "fiber pattern") from an article and encoding this pattern into a data set (the "code number"), and then printing the code number on a label. *See* Kaish, column 27, lines 22-25. Kaish does not teach or suggest transforming the code number into a second data set before the code number is printed on the label. Consequently, Kaish does not teach or suggest "transforming said first data set into a second data set" as recited in claim 1.

Claim 19 as currently amended recites a system for creating a counterfeit resistant article that includes:

- means for reading a first pattern from the article;
- means for encoding said first pattern into a first data set;
- means for transforming said first data set into a second data set;
- means for converting said second data set into a second pattern; and
- means for marking the article with said second pattern.

Kaish does not teach or suggest each and every feature of claim 19. For example, for the reasons cited above in reference to claim 1, Kaish does not teach "means for transforming said first data set into a second data set" as recited in claim 19.

Since Kaish does not teach or suggest each and every element of claims 1 and 19, this reference cannot anticipate those claims. Accordingly, the Examiner's rejection of claims 1 and 19 as anticipated by Kaish is traversed and Applicants respectfully request that these rejections be reconsidered and withdrawn. Furthermore, since claims 2-6 and 20-24 depend from claims 1 and 19, respectively (and therefore contain each and every feature of claims 1 and 19, respectively), Kaish does not teach or suggest each and every feature of those claims. Therefore, Applicants respectfully request that the rejections of claims 2-6 and 20-24 be reconsidered and withdrawn.

The Examiner has rejected claims 7-11, 13-17, 25-29 and 31-35 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,069,955 to Coppersmith *et al.* (hereinafter "Coppersmith"). By the foregoing amendments, claims 7-11 and 25-29 have been cancelled without prejudice to or disclaimer of the subject matter recited therein, thereby rendering the rejection of these claims moot. Accordingly, Applicants respectfully request that the rejections of claims 7-11 and 25-29 be reconsidered and withdrawn.

With respect to the rejection of claims 13-17 and 31-35 as anticipated by Coppersmith, Applicants respectfully traverse based on the foregoing amendments and the following remarks.

Coppersmith is directed toward protecting articles that are highly susceptible to counterfeiting. According to Coppersmith, "a visible label" and "a hidden label" are "attached respectively in a visible and a hidden location [on a] product." *See*

Coppersmith, column 3 lines 47-49. The visible label is generated by using a first "private key" to encrypt a serial number, and the hidden label is generated by using a second "private key" to encrypt the same serial number. *See* Coppersmith, column 3 lines 41-46. The authenticity of the label can be determined in two ways: comparing a first "public key" that corresponds with the first "private key" to the visible label or comparing a second "public key" that corresponds with the second "private key" to the hidden label. *See* Coppersmith, column 3 lines 52-58.

Claim 13 as currently amended recites a method of identifying counterfeit articles that includes the steps of:

- reading a first pattern and a second pattern;
- converting said first pattern and second pattern into a corresponding first data set and second data set; and
- comparing said first and second data sets to each other.

Coppersmith does not teach or suggest each and every feature of claim 13. For example, Coppersmith does not teach or suggest "comparing said first and second data sets to each other" as recited in claim 13. Rather, as described above, Coppersmith teaches comparing a "visible" label to a first public key and a "hidden" label to a second public key, which is a different approach than comparing two data sets to each other. *See* Coppersmith, column 3 lines 52-58.

Claim 31, as currently amended recites a system for identifying counterfeit articles that includes:

- means for reading a first pattern and a second pattern;
- means for converting said first pattern and said second pattern into a corresponding first dataset and second data set; and
- means for comparing said first and second data sets to each other.

Coppersmith does not teach or suggest each and every element of claim 31. For example, for the reasons cited above with reference to claim 13, Coppersmith does not

teach or suggest a "means for comparing said first and second data sets to each other" as recited in claim 31.

Since Coppersmith does not teach or suggest each and every feature of claims 13 and 31, this reference cannot anticipate those claims. Accordingly, the Examiner's rejection of claims 13 and 31 as anticipated by Coppersmith is traversed and Applicants respectfully request that the rejections of claims 13 and 31 be reconsidered and withdrawn. Furthermore, since claims 14-17 and 32-35 depend from claims 13 and 31, respectively (and therefore contain each and every feature of claims 13 and 31, respectively), Coppersmith does not teach or suggest each and every feature of those claims. Therefore, Applicants respectfully request that the rejections of claims 14-17 and 32-35 be reconsidered and withdrawn.

The Examiner has rejected claims 37-38 and 40-41 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,748,533 to Wu *et al* (hereinafter "Wu"). Based on the foregoing amendments and the following remarks, Applicants respectfully traverse.

Wu is generally directed toward "verifying the authenticity of an electronic document or article." *See* Wu, column 5 lines 60-61. Wu teaches encrypting information printed on an article (e.g., a passport) to generate an invisible watermark. The "invisible watermark in an official seal increases the verifiable authenticity of the article." *See* Wu, column 12 lines 50-52. Wu further teaches that the information can be derived from printed language that appears on the article (e.g., "Name of Country" printed on a passport) or from "invariant features of [a] facial image." *See* Wu, column 12 lines 54-66.

Claim 37 as currently amended recites a counterfeit resistant article that includes:

a first randomly-generated marking readable to generate a first data set;  
and  
a second marking readable to generate a second data set, wherein said first data set and said second data set are related according to a predefined relationship.

Wu does not teach or suggest each of the foregoing features. For example, Wu does not teach using a "randomly-generated marking to generate a first data set." In particular, the information that Wu uses to mark an article with an invisible watermark is not "randomly-generated." That is, the name of a country and the "invariant features of a facial image" are not randomly-generated markings.

Since Wu does not teach or suggest each and every feature of claim 37, it cannot anticipate this claim. Accordingly, the Examiner's rejection of claims 37 as anticipated by Wu is traversed and Applicants respectfully request that the rejection of claim 37 be reconsidered and withdrawn. Furthermore, since claims 38-41 depend from claim 37 (and therefore contain each and every limitation of claim 37), Wu does not teach or suggest each and every feature of those claims. Therefore, Applicants respectfully request that the rejections of claims 38-41 be reconsidered and withdrawn.

The Examiner has rejected claim 42 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,131,718 to Witschorik *et al* (hereinafter "Witschorik"). By the foregoing amendment, claim 42 has been cancelled without prejudice to or disclaimer of the subject matter recited therein, thereby rendering this rejection moot. Accordingly, Applicants respectfully request that the rejection of claim 42 be reconsidered and withdrawn.

***Rejections under 35 U.S.C. § 103***

The Examiner has rejected claims 12, 18, 30 and 36 under 35 U.S.C. § 103(a) as being unpatentable over Coppersmith as applied to claims 7 and 25, and further in view of U.S. Patent No. 5,867,586 to Liang (hereinafter "Liang"). By the foregoing amendments, claims 12 and 30 have been cancelled without prejudice to or disclaimer of the subject matter recited therein, thereby rendering the rejection of these claims moot. Accordingly, Applicants respectfully request that the rejections of claims 12 and 30 be reconsidered and withdrawn.

With respect to the rejection of claims 18 and 36 over Coppersmith in view of Liang, Applicants respectfully traverse based on the foregoing claim amendments and the following remarks.

As an initial matter, Applicants note that claims 18 and 36 depend from claims 13 and 31, respectively, and not from claims 7 and 25. In any case, as submitted above, Coppersmith does not teach or suggest each and every limitation of claims 13 and 31, and further Liang does not provide the missing teaching or suggestion. Liang is directed toward an authentication system that combines a source of ultraviolet light with an apparatus for capturing and recognizing either graphic images or characters or both. In particular, Liang teaches marking an article "with fluorescent indicia" and using an ultraviolet light source to "illuminate articles to be tested for authenticity." *See* Liang, column 5 line 67 and column 5 line 52, respectively. Liang is conspicuously silent on the issues of "comparing said first and second data set to each other" and "means for comparing said first and second data set to each other," as recited by claims 13 and 31, respectively.

Since Liang and Coppersmith, alone or in combination, do not teach or suggest each and every limitation of independent claims 13 and 31, the references cannot render the respective dependent claims 18 and 36 obvious. Accordingly, the Examiner's rejections of claims 18 and 36 under 35 U.S.C. § 103(a) are traversed and Applicants respectfully request that these rejections be reconsidered and withdrawn.

The Examiner has rejected claim 39 under 35 U.S.C. § 103(a) as being unpatentable over Wu as applied to claim 37, and further in view of Liang. Based on the foregoing claim amendments and the following remarks, Applicant respectfully traverses.

The above-described shortcomings of Wu with respect to claim 37 are not remedied by the teachings of Liang. For example, Liang does not teach "a first randomly-generated marking readable to generate a first data set." In fact, Liang teaches an authentication system that uses "a predetermined set of graphic images and characters." *See* Liang, column 4 lines 45-46.

Since Wu and Liang, alone or in combination, do not teach or suggest each and every feature of independent claim 37, the combination of Wu and Liang fail to support a *prima facie* obviousness rejection of this claim. Furthermore, dependent claim 39 is also not rendered obvious by the combination for at least the same reasons as the independent claim 37 from which it depends and further in view of its own features. Accordingly, the Examiner's rejection of claim 39 under 35 U.S.C. § 103(a) is traversed and Applicants respectfully request that this rejection be reconsidered and withdrawn.

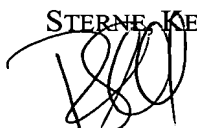
***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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